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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,550	08/19/2003	Yoshinori Ito	1232-5114	4276
27123	7590	09/21/2004	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			CHOI, WILLIAM C	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/643,550	Applicant(s) ITO, YOSHINORI	
	Examiner William C. Choi	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 10-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0804.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

Receipt of the Information Disclosure Statement (IDS) with the copies of the references cited therein was received on 8/17/2004. An initialized copy of the IDS is enclosed with this office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10-13, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nanba et al (U.S. 6,545,819 B1).

In regard to claim 10, Nanba et al discloses a zoom lens system (column 25, line 53 – column 26, line 11, Figure 21) comprising, in order from an object side an image

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side: a first lens unit having negative optical power (column 25, lines 58-60, Figure 21, "L1"); a second lens unit having positive optical power (column 25, lines 65-66, Figure 21, "L2"), said second lens unit consisting of, in order from the object side to the image side, a first positive lens element having an aspherical surface (column 27, line 43, "R6", Figure 21, "21"), and a cemented lens having an aspherical surface (column 27, line 46, "R10", Figure 21, "23"); said cemented lens being formed by cementing a second positive lens element and a negative lens element (Figure 21, "22, 23"); and a third lens unit having positive optical power (column 26, lines 3-4, Figure 21, "L3"); wherein during zooming operation of said zoom lens system, a distance between said first lens unit and said second lens unit is smaller at a telephoto end than at a wide-angle end (column 27, line 55, Figure 21, "D4"), and a distance between said second lens unit and said third lens unit is changed (column 27, line 56, Figure 21, "D10"); during zooming operation of said zoom lens system from the wide-angle end to the telephoto end, said second lens unit is moved toward the object side (column 26, lines 9-10, Figure 21, "L2"); and satisfies the claimed condition regarding on-axis distance between said two aspherical surfaces in said second lens unit (column 27, lines 42-46, "D6-D9").

Regarding claims 11 and 18, Nanba et al discloses wherein said zoom lens system forms an image on a photosensitive face of a solid-state pick-up device (column 1, lines 17-23).

In regard to claim 12, Nanba et al discloses a zoom lens system (column 25, line 53 – column 26, line 11, Figure 21) comprising, in order from an object side an image side: a first lens unit having negative optical power (column 25, lines 58-60, Figure 21,

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"L1"); a second lens unit having positive optical power (column 25, lines 65-66, Figure 21, "L2"), said second lens unit consisting of three lens elements having at least two aspherical surfaces (column 27, lines 43 & 46, "R6, R10", Figure 21, "21, 23"); and a third lens unit having positive optical power (column 26, lines 3-4, Figure 21, "L3"); wherein during zooming operation of said zoom lens system, a distance between said first lens unit and said second lens unit is smaller at a telephoto end than at a wide-angle end (column 27, line 55, Figure 21, "D4"), and a distance between said second lens unit and said third lens unit is changed (column 27, line 56, Figure 21, "D10"); during zooming operation of said zoom lens system from the wide-angle end to the telephoto end, said second lens unit is moved toward the object side (column 26, lines 9-10, Figure 21, "L2"); and satisfies the claimed condition regarding on-axis distance between said two aspherical surfaces in said second lens unit (column 27, lines 42-46, "D6-D9").

Regarding claims 13 and 19, Nanba et al discloses wherein said zoom lens system forms an image on a photosensitive face of a solid-state pick-up device (column 1, lines 17-23).

Claims 14-16 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mihara et al (U.S. 6,417,973 B2).

In regard to claim 14, Mihara et al discloses a zoom lens system (column 1, lines 9-15, Figure 1) comprising, in order from an object side an image side: a first lens unit having negative optical power (column 14, lines 12-13, Figure 1, "G1"); a second lens unit having positive optical power (column 14, lines 13-14, Figure 1, "G2"), said second

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lens unit consisting of three lens elements (Figure 1, "G2"), and two aspherical surfaces being provided on a convex face (column 24, Example 1, Figure 1, " r_7 ") and a concave face of two different lens elements in said three lens elements (column 24, Example 1, Figure 1, " r_{11} "), respectively; and a third lens unit having positive optical power (column 14, lines 14-15, Figure 1, "G3"); wherein during zooming operation of said zoom lens system, a distance between said first lens unit and said second lens unit is smaller at a telephoto end than at a wide-angle end (Figure 1, "G1, G2"), and a distance between said second lens unit and said third lens unit is changed (column 14, lines 21-25); and during zooming operation of said zoom lens system from the wide-angle end to the telephoto end, said second lens unit is moved toward the object side (column 14, lines 21-22, Figure 1, "G2").

Regarding claim 15, Mihara et al discloses wherein said aspherical surface provided on said convex face is disposed on a side closest to the object in said second lens unit (column 24, Example 1, Figure 1, " r_7 "), and said aspherical surface provided on said concave face is disposed on a side closest to the image in said second lens unit (column 24, Example 1, Figure 1, " r_{11} ").

Regarding claims 16 and 20, Mihara et al discloses wherein said zoom lens system forms an image on a photosensitive face of a solid-state pick-up device (column 50, line 54 – column 51, line 15, Figure 28 "49").

Allowable Subject Matter

Claims 1-9 and 17 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 1-9 and 17: a zoom lens system comprising, in order from an object to image side: negative, positive and positive lens units as claimed, specifically wherein the second lens unit consists of, in order from the object to image side, a first positive lens element having an aspherical surface, and a cemented lens formed by cementing a second positive lens element and a negative lens element having an aspherical surface.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka (U.S. 6,611,386 B2) and Minefuji (U.S. 6,597,513 B2) are being cited herein to show zoom lens systems comprising some of the structural limitations of that of the claimed invention, but do not specifically disclose the aspherical surface locations or distances as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone


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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

W.C

William Choi
Patent Examiner
Art Unit 2873
September 16, 2004


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